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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Carl Christian Hansen

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10/20/2004

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EXAMINER

LEVITAN, DMITRY

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/967,047	Applicant(s) HANSEN, CARL CHRISTIAN	
	Examiner Dmitry Levitan	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6,9-11,14-16,18-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,9-11,14-16,18-20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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Amendment, filed 07/06/04 has been entered. Claims 1, 4-6, 9-11, 14-16, 18-20 and 22-27 remain pending.

Claim Rejections - 35 USC § 112

In light of Applicant's amendment and remarks, claims rejection under the second paragraph of 35 U.S.C. 112 has been withdrawn.

Claim Rejections - 35 USC § 103

1. Claims 1, 4-6, 9-11, 14-16, 18, 20, 22, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rustad.

2. Regarding claims 1, 5, 6, 10, 11, 15, 16, 18, 20, 22 and 24 Rustad teaches a method, an article, a signal, an apparatus and a framer comprising:

Transmitting and receiving a DSL stream (Fig. 13 and 18:65-67, 19:1-7, 19:56-60) with a first proportion of voice signal to data signals (switched channels 12, 14, 16 and digital data path 20 on Fig. 1, 6:30-67, 7:1-12) when a telephone (19:5-7) coupled to receive the communication stream is in a first state (off-hook, carry switched data communication 7:13-21), wherein the voice signal comprises a voice channel (switched channel 16 on Fig. 1) that includes both audio signals and line signals corresponding to the voice channel (voice and robbed-bit signaling on Fig. 4 and 5, 8:5-45); and

Transmitting a second communication stream with a second proportion of voice signals (switched channels 12, 14 and digital data path 20 on Fig. 2, 7:13-41) to data signals when the telephone is in a second state (switched data communication is terminated 7:13-21), wherein the

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line signals corresponding to the voice channel (robbed-bits on Fig. 4 and 5, 8:41-63) and no audio signals from the telephone (unswitched data signals in channel C3 on Fig. 4 and 5, 8:59-67, 9:1-7) are transmitted and further wherein bandwidth of the voice channel (the most significant seven bits 8:53-58) used for the audio signals when the telephone is in the first state is used for data signals when the telephone is in the second state (on-hook state 8:62-65).

Rustad teaches transmitting the data signals according to HDSL, SDSL and VDSL (10:16-20).

Rustad does not teach using ADSL in the system. Official notice is taken that ADSL is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using ADSL to the system of Rustad, to utilize widely known and available technology.

3. In addition, regarding claims 16, 20 and 24, Rustad teaches

a control circuit (controller 120, monitor 134 and detector 136 on Fig. 6 and 11:7-26) coupled to a telephone (switched data equipment 102 on Fig. 6 and 9:45-51, 19:1-7) and a source of data signals (unswitched data equipment 106 on Fig. 6 and 9:52-64) to determine the status of the telephone (11:7-26) and generate one or more control signals (11:7-26) and

a framer (carrier interface 126 on Fig. 6 and 10:16-20) coupled to the control circuit and the telephone (switched data equipment 102 on Fig. 6 and 9:45-51, 19:1-7) to allot a channel to carry control, data and audio signals in both states (9:65-67, 10:1-25).

4. Regarding claims 4, 9 and 14, Rustad teaches the voice channel in the first proportion comprises an 8-bit signal transmitted at 8 kHz (Fig. 4 and 5, 1:32-55, 8:14-18) and the line signals in the second proportion comprises a 1-bit signal transmitted at 8 kHz (robbed-bit signaling bits A, B, C and D on Fig. 4 and 5).

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5. Regarding claims 25-27, Rustad teaches the first bandwidth, comprising 64 kbit/sec (off-hook bandwidth, voice and signaling of C2 on Fig. 4 and 5, 8:25-58) is greater than the second bandwidth, comprising 8 kbit/sec (robbed-bit signaling bits A, B, C and D of C3 on Fig. 4 and 5).

6. Claims 19, 23 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rustad in view of Darveau (US 123456789).

Regarding claims, 19, 23 and 28, Rustad substantially teaches all the limitations of claims 19, 23 and 28 including framer, receiving signals from a telephone, passing voice and signaling in off-hook state and signaling in on-hook state to DSL link, including other modifications and variations of the disclosed system (19:42-60).

Rustad does not teach using two multiplexers.

Darveau teaches using two multiplexers (MUX 68 and MUX 54 on Fig. 2A and B, 3:55-67, 4:1-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using two multiplexers to the system of Rustad, as a hardware oriented implementation of the system.

Response to Arguments

7. Applicant's arguments filed 07/06/04 have been fully considered but they are not persuasive.

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On page 11 of the Response, Applicant argues that because ADSL is not interchangeable with DSL it would not be obvious to add ADSL to the system of Rustad.

Examiner respectfully disagrees.

Rustad teaches using Very High-rate Digital subscriber Line (VDSL) in his system. VDSL is known as a variation of ADSL (Black. Voice over IP. Prentice Hall 1999, page 84), making obvious to use ADSL in Rustad system.

Examiner therefore believes that the cited references meet all the claims limitations and the rejection is proper.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Black Voice over IP. Prentice Hall 1999, page 84.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

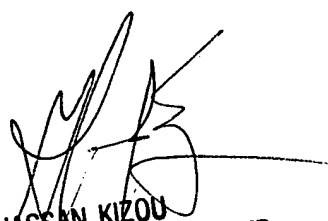
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
Patent Examiner.
09/29/04



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